



29462

AF\$
3600
#14

THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:
Fred Christian Baij

Serial Number: 09/535,457

Filed: 03/24/2000

For: FRAMING LUMBER PRODUCTS AND METHODS

Group Art Unit: 3637

Examiner: Chi Q. Nguyen

REPLY BRIEF

Hon. Commissioner of Patents and Trademarks
Washington, D.C. 20231

ATTENTION: Board of Appeals and Interferences

RECEIVED
JAN 13 2003
GROUP 3600

APPELLANT'S REPLY BRIEF (37 CFR §1.193)

This reply brief is submitted in response to the Examiner's Answer dated 11/05/2002 in the above identified application.

ARGUMENTS

Claims 1-30 and 65-75 remain rejected under 35 U.S.C. §103(a) as being unpatentable over Varoglu et al (US 5,782,054) in view of Thomas (US 4,845,858).

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, D.C. 20231

ON January 3, 2003

THERESA PIPER

(Typed name of person mailing paper or fee)

Theresa J Piper

(Signature)

1/3/03

(Date Of Signature)

Turning first to page 6 line 11 of the Examiner's Answer, the examiner states that *because they* (Varoglu et al and Thomas) *both deal with building construction matters..., it is obvious to combine these references*. That statement simply cannot be supported as logical, with or without application to the case at hand.

What the examiner is saying is that it is obvious to combine any two references which both deal with building construction matters. Namely, using such logic, once a collection of references has been identified to the application record, and wherein all such references apply to building construction, it is obvious to combine any 2 of those references in arriving at a solution to any building construction problem. But how can this be? Assuming there are more than 2 references in the collection, and if each 2 references represents an "obvious" combination/solution, then the number of "obvious" solutions/combinations is the 2-element permutation of the number of references in the record.

Where as in this case, there are 11 references in the record, and using the examiner's logic, there are no less than 50 "obvious" combinations/solutions. Accordingly, the examiner's logic at page 6 line 11 of the Reply Brief must be rejected as fatally flawed.

On page 5 of the Examiner's Answer, lines 9-18, the examiner asserted that it would have been obvious to apply stud marking directly on plates as functional equivalence of the tape of Thomas. Applicant's Appeal Brief illustrated a number of indicators of non-equivalence. The examiner commented on these indicators at page 6 lines 12-19.

Following the sequence of the examiner's comments on page 5 of the Examiner's Answer, the respective indicators are again reviewed briefly here.

1. *Tape will interfere with direct surface-to-surface contact* between the end of a stud and a side surface of the respective plate. The examiner states at page 7 lines 4-9 that the tape is relatively thin thus joining the studs and end plates would not cause any interference.

This statement is false on its face. Interference between the stud and the plate occurs any time the tape is located in a position between the stud and the plate. Interference can take any of a number of forms. In this case, probably the most relevant form of interference is that the adhesive on the tape can act as a lubricant between the stud and the plate, facilitating undesired movement of the stud with

respect to the plate while the plate/stud assembly is being fabricated; and before the studs are secured in place with suitable fasteners.

2. *Lumber studs could be wet, oil, dusty and can interfere with good adhesion between marking tapes and studs.* Tape markings suffer with these problems. Direction application of marking material to the studs does not suffer from these problems.

3. *Marking tapes can move ahead of the stud as the stud is being installed.* Friction between the end of the stud and the side of the plate stretches the tape which is behind movement of the end of the stud, and pushes on the tape which is ahead of the movement of the end of the stud. Where the side-ways stretching force being exerted on the tape is sufficiently great that the stud does not slide with respect to the tape, either the tape will break, or the adhesive will be released from one of the tape substrate or the plate. Either way, the tape becomes useless for determining stud location on that portion of the tape. Where the tape is being pushed ahead of the end of the stud, such movement of the tape with respect to the plate makes the tape useless for the intended purpose of determining stud location on that portion the tape so affected.

4. *The marking tape of Thomas is not properly printed to be used with the studs of Varoglu et al.* The tape of Thomas must be modified in a way not taught by Thomas in order to be used with the stud orientation of Varoglu et al, assuming that the tape will work with the stud orientation of Varoglu et al.

5. *No reference teaches or suggests a bundle of marked lumber.* The examiner has stated disagreement, but has given no basis in any reference which purports to be a teaching regarding a bundle of marked lumber.

6. A further function of the markings is (1) to give notice before a stud is secured in the assembly as to the desired location of the stud, (2) to give notice while the stud is being secured in the assembly as to proper location of the stud, (3) to give notice after the stud has been secured in the assembly that the stud is properly located, and (4) to provide certainty that the above notices are accurate. As has been noted above, the tape can move. To the extent the tape moves during the assembly process, the tape fails to fulfill the third notice function, and likely fails to fulfill the second notice function. The mere fact that the tape might move is enough to prevent the user from relying on the tape for proper stud location, whereby the tape inherently fails the fourth requirement.

By contrast, a marking placed directly on the lumber product fulfills all four of the above requirements.

Page 7 line 2 of the Examiner's Answer states that *Applicant's argument with respect to joined lumbers/studs is improper, as claims do not recite joined lumber/studs*. Applicant's statements regarding joinder of studs and plates is an analysis of the working environment in which such lumber is typically used. Applicant submits that any analysis of obviousness of the product of the invention must attempt to faithfully recreate the thoughts of one skilled in the art at the time the invention was made. In this case, such thoughts would necessarily have considered both how the product is made and how the product is used.

Product of the invention, as well as product of the combination of references, is used in assemblies of such lumber in constructing buildings. Thus, not only is applicant's analysis and argument proper, valid analysis of the obviousness question requires such consideration of the interactions of the marked lumber pieces with other lumber pieces in such assemblies.

Thus, even though the claims do not recite assemblies which use such lumber, such assemblies must be contemplated in the obviousness analysis in order to properly assess whether one of skill in the art would have been led to the claimed invention. Restated, if the assemblies made with lumber corresponding to the combined teachings of the references is defective functionally, one can conclude that lumber corresponding to the combined teachings of the references would not have been obvious. Accordingly, applicant's argument/analysis is proper and should be given full consideration.

Finally, the examiner states that, *in the construction business, one always encounters unevenness, variations in construction materials. To make adjustments to accommodate the particularities of the materials and building construction plan are common and well known in the construction business*. True enough. But unevenness or variation present significant obstacles to use of structures of the combination of the references.

By contrast, lumber product of the invention, bearing markings directly on the lumber as a substrate, is neutral to, is not affected by, such unevenness or variation.

Thus, the user can have the benefit of the markings without the negative affect of the tape substrate.

In summary, combining the references as suggested by the examiner, does not arrive at the invention. The examiner relies on a further step, saying it would have been obvious to modify the structure arrived at by combining the references, and asserts functional equivalence at page 5 line 16. The above analysis illustrates the many differences in function, and the superiority of the invention over either of the references alone, as well as over the structure resulting from combining the references as suggested by the examiner.

Nowhere does the examiner assert or suggest that one can combine the references and arrive at the invention. The closest the examiner comes to such statement is to state, with no foundational support, at page 5 lines 9-17 of the Examiner's Answer that *it would have been an obvious matter of design choice to apply stud marking locator directly on plates*. The examiner wants us to believe that it would have been obvious to combine the references and that, as a second step after the references had been combined, it would have further been obvious to then delete the tape substrate and place the markings directly on the lumber.

The examiner would further have us believe that having marking on a single piece of lumber makes it obvious to make a bundle of such marked lumber. But no reference suggests marking the lumber anywhere except at the construction site. But that's where the bundles are opened, unbundled prior to applying the marking tape of Thomas. Thus, any assertion of a bundle of marked lumber is wholly without basis in the art.

No fee is believed to be due. Should any fee be properly due, or if any refund is due, kindly charge same, or credit any overpayment, to Deposit Account 23-2130.

Respectfully submitted,
Fred Christian Baij

Customer Number: 23482

January 3, 2003
Appleton, Wisconsin
920-831-0100
920-831-0101 FAX

By: Thomas D. Wilhelm
Thomas D. Wilhelm
Attorney for Applicant
(Reg. No. 28,794)